National Weather Service
Storm Data and Unusual Weather Phenomena

March 2006

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

ILLINOIS, Northwest

ILZ001>002-007-009-015>018-024>026-034>035 **Jo Daviess - Stephenson - Carroll - Whiteside - Rock Island - Henry - Bureau - Putnam - Mercer - Henderson - Warren - Hancock - Mcdonough**

01 0000CST **0** **0** **Drought**
31 2359CST

The drought that began back in June 2005 continued through March 2006 but shrunk considerably in size and scope by the start of April 2006. This shrinkage was due to a persistent wet pattern that had set up during March 2006 and continued into April 2006. Since the growing season had yet to begin, the drought was essentially hydrologic in nature. A report of the hydrologic conditions is supplied by the service hydrologist.

River Conditions

Monthly stream flows for March averaged near normal (25th to 75th percentile) to below normal (10th to 24th percentile). All basins averaged below normal except for the lower Cedar-Iowa River basins and the entire Rock River basin, which averaged near normal.

Stream flows began the month with most locations reporting stream flows that were below normal (10th to 24th percentile) or much below normal (less than 10th percentile). A few locations reported near normal (25th to 75th percentile) conditions and one location reported a record low flow for the day. Stream flows gradually decreased until moderate rainfall fell on the 5th. On the 6th, stream flows began increasing in response to this rainfall. Stream flows then remained nearly steady or increased slightly through the 13th when most locations reported near normal conditions. Some locations reported below normal (10th to 24th percentile) flows while other locations reported above normal (76th to 90th percentile) flows.

Stream flows then gradually decreased into the late parts of the month but then rose on the last day of the month. On the 30th most locations reported below normal conditions while some locations reported near or much below normal flows. Moderate rainfall on the 30th resulted in flow increases on the 31st. On that day, half of the locations reported below or much below normal flows and half of the locations reported near or above below normal flows.

Source: U.S. Geological Survey, WaterWatch Web site (http://water.usgs.gov/waterwatch/)

Drought

According to the U.S. Drought Monitor maps, minimal changes in the drought situation occurred during the month. Severe drought conditions (D2) continued to cover much of the HSA with moderate drought conditions (D1) across northwestern portions of the HSA.

ILZ001 **Jo Daviess**

05 1000CST **0** **0** **2K** **Winter Weather**
1600CST

Also from co-op observers.

A late season winter storm moved from the central Plains into the Great Lakes on 5 March 2006. The first wave of snow mixed with some sleet occurred during the pre-dawn hours and caused little if any problems. The second wave of snow occurred toward the end of the morning commute and into early afternoon. Several traffic accidents were reported in Jo Daviess County Illinois. The heaviest snowfall occurred along the U.S. 20 corridor where 4 to 6 inches of snow fell

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

ILLINOIS, Northwest

Hancock County

Augusta | **11** | **1544CST** | | | **0** | **0** | | | **Hail(0.75)**

also reported by police/fire; dime size hail

Hancock County

Plymouth | **11** | **1544CST** | | | **0** | **0** | | | **Hail(0.75)**

Dime size hail

Mcdonough County

Tennessee | **11** | **1555CST 1558CST** | | | **0** | **0** | **4K** | | **Hail(1.25)**

Dime to half dollar sized hail

Mcdonough County

Macomb | **11** | **1557CST 1607CST** | | | **0** | **0** | | | **Hail(0.88)**

Mcdonough County

1 NW Macomb to 5 NW Macomb | **11** | **1613CST** | | | **0** | **0** | **3K** | | **Hail(1.00)**

Dime to quarter sized hail covering the ground.

Warren County

Swan Creek to 1.2 NW Swan Creek | **11** | **1625CST 1627CST** | | | **0** | **0** | | | **Hail(0.75)**

Penny sized hail

Mcdonough County

Macomb | **11** | **1657CST 1727CST** | | | **0** | **0** | | | **Heavy Rain**

1 inch of rain in the past 30 minutes with minor street flooding.

Mcdonough County

Colchester | **11** | **1658CST** | | | **0** | **0** | | | **Hail(0.88)**

Dime to nickel sized hail

Mcdonough County

1.2 W Macomb to 4 W Macomb | **11** | **1700CST 1705CST** | | | **0** | **0** | | | **Hail(1.00)**

Penny to Quarter sized hail.

Mcdonough County

Prairie City | **11** | **1704CST** | | | **0** | **0** | | | **Hail(0.75)**

Penny sized hail

Henry County

Woodhull to 5 E Woodhull | **11** | **1712CST 1721CST** | | | **0** | **0** | **4K** | | **Hail(1.00)**

Penny to Quarter sized hail rapidly covering the ground

Henry County

Cambridge | **11** | **1723CST 1724CST** | | | **0** | **0** | **8K** | | **Hail(1.75)**

Hail ranging from pea to golfball.

Henry County

3 W Atkinson | **11** | **1733CST 1737CST** | | | **0** | **0** | | | **Hail(0.88)**

Dime to nickel sized hail covering the ground at mile marker 25 on I-80. Time is estimated based on radar.

Warren County

2.1 SSE Greenbush | **11** | **1735CST** | | | **0** | **0** | | | **Hail(0.75)**

Dime size hail

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

ILLINOIS, Northwest

Henry County

1 W Geneseo | **11** | **1742CST** | **0** | **0** | | | **Hail(0.88)**

Henry County

6 N Galva | **11** | **1836CST** | **0** | **0** | **3K** | | **Hail(1.00)**

Quarter sized hail.

Scattered thunderstorms developed ahead of a cold front that moved through west central and northwest Illinois. The storms were essentially elevated in nature due to the lack of high winds at the surface. In most cases the hail was marginally severe due to the higher reflectivities aloft barely getting above the freezing level

Henderson County

Media | **12** | **1433CST** **1436CST** | **0** | **0** | | | **Hail(0.75)**

dime size hail

Putnam County

Countywide | **12** | **1606CST** **1625CST** | **0** | **0** | **20K** | | **Hail(1.50)**

An intense thunderstorm moved across the southern part of Putnam County producing hail of 1.00 to 1.50 inches. Hail was reported between Magnolia and Mc Nabb in the 1615-1625 CST time period by several spotters. Additional spotters reported large hail on Illinois 18 west of Magnolia.

Putnam County

2.4 SSE Putnam | **12** | **1606CST** | **0** | **0** | | | **Hail(0.75)**

2 minute duration just north of the Putnam/Marshall county line.

Henry County

3.4 WNW Atkinson | **12** | **1614CST** **1615CST** | **0** | **0** | **2K** | | **Hail(1.00)**

Based on pictures from WQAD-TV web site.

Putnam County

Granville | **12** | **1615CST** **1630CST** | **0** | **0** | | | **Hail(0.88)**

Putnam County

Magnolia to Mc Nabb | **12** | **1615CST** **1625CST** | **0** | **0** | **5K** | | **Hail(1.00)**

multiple reports

Mercer County

6 N Joy | **12** | **1900CST** | **0** | **0** | | | **Hail(1.00)**

nickel to quarter sized hail

Mercer County

Mannon | **12** | **1900CST** | **0** | **0** | **5K** | | **Hail(1.00)**

Nickel to quarter sized hail.

Mercer County

Aledo | **12** | **1918CST** **1922CST** | **0** | **0** | **5K** | | **Thunderstorm Wind (EG52)**

Trees and power lines down

Mercer County

Matherville | **12** | **1925CST** | **0** | **0** | **5K** | | **Thunderstorm Wind (EG52)**

Trees and power lines down

Rock Island County

(Mli) Quad City Arpt | **12** | **1948CST** | **0** | **0** | **300K** | | **Thunderstorm Wind (MG93)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

ILLINOIS, Northwest

1949CST

Measured gust from KMLI ASOS that was confirmed by FAA backup equipment. A Hampton Inn under construction on the northeast side of the airport was demolished and a nearby interstate highway sign was blown over.

NWS survey concluded a microburst occurred on the west edge of the airport. Considerable damage was done to a group of homes, outbuildings, power lines, and trees just outside the airport perimeter. The wind gust of 107 mph bested the old record wind gust of 81 mph at KMLI which was set on 21 August 1987.

Rock Island County

Moline	**12**	**1948CST**	**0**	**0**	**10K**		**Thunderstorm Wind (EG57)**

Many trees were downed across the city. Trinity Medical Center on 7th Street lost all electrical power for several hours. Limited power was available for the facility through emergency generators.

Rock Island County

.5 NE Moline Quad City	**12**	**1949CST** **1950CST**	**0**	**0**	**10K**		**Thunderstorm Wind (EG70)**

Limb from a tree went through the window of the Quality Inn.

Henry County

2 NW Orion	**12**	**1950CST**	**0**	**0**			**Thunderstorm Wind (EG61)**

Estimated 70 mph

Rock Island County

Moline to Rock Is	**12** **13**	**1953CST** **0100CST**	**0**	**0**	**50K**		**Flash Flood**

Thunderstorms trained across the Quad City Metro area and produced rainfall rates exceeding 1 inch per 30 minutes. Spotters, amateur radio, and the media reported numerous roads flooded out or cars floating. By 2015 CST KWQC-TV was reporting cars floating in parts of Rock Island. AT 2030 CST two reports indicated 11th Street and 14th Avenue in Rock Island was under water with 11th Street flooded in other spots.

KMLI ASOS reported 1.78 inches of rain for 12 March 2006 of which 1.66 inches fell during the 1800-2400 CST time period. At the same time, the KDVN ASOS reported 1.05 inches of rain for 12 March 2006. The heaviest rain occurred during the 1900-2300 CST time period in a narrow band in between the two ASOS sites. The highest know rainfall amount occurred in central Davenport where 3.50 inches of rain fell. The closeness of the heavy rainband to the KDVN 88D resulted in a severe underestimation of the rainfall. Rainfall estimates from the distant KILX and KLOT 88D sites indicate 3-4 inches of rain fell.

Rock Island County

Silvis	**12**	**1953CST** **1958CST**	**0**	**0**	**50K**		**Thunderstorm Wind (EG70)**

A screen door was blown off with damage to a carport. Severe damage occurred to a car wash

Henry County

1.2 W Colona	**12**	**1954CST**	**0**	**0**			**Heavy Rain**

1 to 2 feet of standing water in a mobile home park. According to the spotter, this area is well known for having poor drainage during heavy rainfall. Time estimated based on radar.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

ILLINOIS, Northwest

Henry County
1.2 W Colona | **12** | **1954CST 1957CST** | | | **0** | **0** | **5K** | | **Thunderstorm Wind (EG57)**
Numerous trees down at the confluence of the Green and Rock Rivers near the Hennepin Canal. Some of the trees were observed to be unhealthy. Time estimated based on radar.

Rock Island County
Carbon Cliff | **12** | **1954CST 1958CST** | | | **0** | **0** | **1K** | | **Thunderstorm Wind (EG57)**
flag pole down

Rock Island County
Illinois City | **12** | **2006CST** | | | **0** | **0** | | | **Hail(0.75)**
marble to dime size hail

Whiteside County
Erie | **12** | **2020CST 2022CST** | | | **0** | **0** | **1K** | | **Thunderstorm Wind (EG52)**
wires down

Whiteside County
2 N Morrison to 2 NNE Morrison | **12** | **2020CST 2026CST** | | | **0** | **0** | **3K** | | **Hail(1.00)**

Whiteside County
2 S Coleta to Coleta | **12** | **2048CST** | | | **0** | **0** | **3K** | | **Hail(1.00)**

Carroll County
Milledgeville | **12** | **2058CST** | | | **0** | **0** | **3K** | | **Hail(1.00)**

Mercer County
Sherrard | **12** | **2117CST** | | | **0** | **0** | **5K** | | **Hail(1.00)**

Henderson County
3 W Bald Bluff | **12** | **2119CST** | | | **0** | **0** | | | **Hail(0.88)**

Henry County
Galva | **12** | **2125CST** | | | **0** | **0** | | | **Hail(0.75)**
Delayed report. Time estimated based on radar.

Carroll County
Thomson | **12** | **2130CST** | | | **0** | **0** | | | **Hail(0.88)**

Whiteside County
6.8 W Morrison | **12** | **2130CST** | | | **0** | **0** | **25K** | | **Thunderstorm Wind (EG57)**
15 power poles snapped at ground level on Frog Pond Road between Garden Plain and Hazel Roads

Carroll County
Mt Carroll | **12** | **2155CST** | | | **0** | **0** | | | **Hail(0.75)**
dime size hail

Whiteside County
Prophetstown | **12** | **2204CST 2220CST** | | | **0** | **0** | | | **Heavy Rain**
minor flooding of lower streets

Stephenson County
German Vly | **12** | **2212CST 2219CST** | | | **0** | **0** | **2K** | | **Thunderstorm Wind (EG70)**
The bow echo that developed and raced across Whiteside and Carroll counties caught the far southeast corner of Stephenson County. The apex of the bow passed right over German Valley and snapped off trees a few feet above the base

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

ILLINOIS, Northwest

Warren County
Little York 12 2215CST 0 0 5K **Hail(1.00)**

Warren County
5.2 N Monmouth to Alexis 12 2215CST 2220CST 0 0 2K **Thunderstorm Wind (EG50)**
Winds estimated at greater than 50 mph from Lake Warren to Alexis.

Warren County
Kirkwood 12 2217CST 2220CST 0 0 2K **Thunderstorm Wind (EG52)**
limbs down

Mercer County
Matherville 12 2218CST 0 0 6K **Thunderstorm Wind (EG52)**
power poles and branches down

Mercer County
North Henderson 12 2220CST 0 0 6K **Thunderstorm Wind (EG52)**
power poles and branches down

Warren County
1 S Gerlaw 12 2224CST 0 0 **Hail(0.75)**
Also, heavy rain and estimated 40-50 mph winds.

Henry County
Atkinson 12 2250CST 0 0 300K **Thunderstorm Wind (EG83)**
A bow echo interacted with a surface boundary over Atkinson and produced a ducted downburst over a narrow path of about 1 mile. About 12 homes sustained varying amounts of damage with many trees either uprooted or damaged. An RV wasflipped onto its side.

At the Atkinson Grain & Fertilizer plant a 100 foot leg was torn away and dropped on the railroad tracks where it was hit by a slow moving train several hours later.

Henry County
2.2 NE Atkinson 12 2252CST 0 0 12K **Thunderstorm Wind (EG78)**
A bow echo moved across Henry County at around 52 knots (60 mph) and produced a downburst that destroyed a farm outbuilding (that doubled as a garage) and scattered it across a nearby field. Time estimated based on radar.

Henry County
Annawan 12 2259CST 0 0 **Hail(0.88)**
Also heavy rain; truck struck by lightning

Bureau County
Walnut 12 2305CST 2309CST 0 0 3K **Thunderstorm Wind (EG57)**
branches a couple of inches in diameter down across the town

Bureau County
3 E Walnut 12 2308CST 2312CST 0 0 1K **Thunderstorm Wind (EG61)**
A door was blown off a barn. Time estimated based on radar.

Bureau County
1 NW Princeton 12 2320CST 0 0 2K **Thunderstorm Wind (EG57)**
power pole down on Backbone Rd

Putnam County
Mc Nabb 12 2350CST 0 0 **Hail(0.88)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

ILLINOIS, Northwest

Mcdonough County

Adair **13** **0015CST** **0** **0** **1K** **Thunderstorm Wind (EG52)**

Power poles were downed near Adair.

A strong spring storm system moved from the central Plains into the Great Lakes region from 12 March to 13 March 2006. An initial low level jet of 30-40 knots increased to 40-50 knots after sunset on 12 March which increased the available moisture for thunderstorms and heavy rain development.

A series of upper level disturbances developed waves of thunderstorms during the afternoon and overnight hours along and north of the warm front. Low freezing and wet bulb zero levels north of the warm front resulted in the storms being prolific hail producers. Outflow boundaries left over from the initial thunderstorm waves combined with the northward moving warm front provided the focus for locally heavy rainfall that lead to flash flooding in the Quad Cities metropolitan area.

ILZ024>026-034>035 **Mercer - Henderson - Warren - Hancock - Mcdonough**

21 **0200CST** **0** **0** **10K** **Winter Weather**
1200CST

Also from Co-op observers

An early Spring winter storm moved from the central Plains into the Ohio Valley from 20 March to 21 March 2006. An initially dry atmosphere precluded precipitation from reaching the ground but once saturation had occurred, snow broke out over southeast Iowa, west central Illinois, and far northeast Missouri in a 3-5 hour time period. Most of the snow had fallen by sunrise on 21 March. Snowfall amounts were generally 2-4 inches from Interstate 80 down to U.S. 34 with 4-6 inches from U.S. 34 on south. Mesoscale forcing during the morning of 21 March allowed for a band of 4-6 inch snowfall to occur along a line from Oskaloosa, Iowa to Galva, Illinois.

Hancock County

3.5 S Sutter **30** **2030CST** **0** **0** **0.50K** **Thunderstorm Wind (EG52)**

Branches several inches in diameter downed.

A strong spring storm system produced two separate squall lines that moved through northern Missouri, southeast Iowa, and west central Illinois. The first squall line produced marginally severe winds in Hancock County south of Sutter. The second squall line produced severe winds in Scotland County at Memphis. Several reports of nonsevere thunderstorm winds of 43 to 48 knots (50 to 55 mph) were received from spotters or observed by AWOS/ASOS stations across northeast Missouri, southeast Iowa, and west central Illinois. Half inch hail was reported 2.5 miles south of Warsaw in Hancock County at 2152-2153 CST

IOWA, East Central and Southeast

IAZ053>054-063>068-076>078-087>089-098>099 **Jones - Jackson - Iowa - Johnson - Cedar - Clinton - Muscatine - Scott - Keokuk - Washington - Louisa - Jefferson - Henry - Des Moines - Van Buren - Lee**

01 **0000CST** **0** **0** **Drought**
31 **2359CST**

The drought that began back in July 2005 continued through March 2006 but shrunk considerably in size and scope by the start of April 2006. This shrinkage was due to a persistent wet pattern that had set up during March 2006 and continued into April 2006. Since the growing season had yet to begin, the drought was essentially hydrologic in nature. A report of the hydrologic conditions is supplied by the service hydrologist.

River Conditions

Monthly stream flows for March averaged near normal (25th to 75th percentile) to below normal (10th to 24th percentile). All

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

IOWA, East Central and Southeast

basins averaged below normal except for the lower Cedar-Iowa River basins and the entire Rock River basin, which averaged near normal.

Stream flows began the month with most locations reporting stream flows that were below normal (10th to 24th percentile) or much below normal (less than 10th percentile). A few locations reported near normal (25th to 75th percentile) conditions and one location reported a record low flow for the day. Stream flows gradually decreased until moderate rainfall fell on the 5th. On the 6th, stream flows began increasing in response to this rainfall. Stream flows then remained nearly steady or increased slightly through the 13th when most locations reported near normal conditions. Some locations reported below normal (10th to 24th percentile) flows while other locations reported above normal (76th to 90th percentile) flows.

Stream flows then gradually decreased into the late parts of the month but then rose on the last day of the month. On the 30th most locations reported below normal conditions while some locations reported near or much below normal flows. Moderate rainfall on the 30th resulted in flow increases on the 31st. On that day, half of the locations reported below or much below normal flows and half of the locations reported near or above below normal flows.

Source: U.S. Geological Survey, WaterWatch Web site (http://water.usgs.gov/waterwatch/.

Drought

According to the U.S. Drought Monitor maps, minimal changes in the drought situation occurred during the month. Severe drought conditions (D2) continued to cover much of the HSA with moderate drought conditions (D1) across northwestern portions of the HSA.

IAZ040>042	**Buchanan - Delaware - Dubuque**								
	05	**0830CST** **1430CST**			**0**	**0**	**6K**		**Winter Weather**
	Also from co-op observers.								
	A late season winter storm moved from the central Plains into the Great Lakes on 5 March 2006. The first wave of snow mixed with some sleet occurred during the pre-dawn hours and caused little if any problems. The second wave of snow occurred toward the end of the morning commute and into early afternoon. Several traffic accidents were reported in Jo Daviess County Illinois. The heaviest snowfall occurred along the U.S. 20 corridor where 4 to 6 inches of snow fell.								
Iowa County									
1 SW Conroy	**08**	**1752CST** **1753CST**			**0**	**0**			**Hail(0.88)**
Cedar County									
1 NE Lime City	**08**	**1848CST**			**0**	**0**			**Hail(0.88)**
	Dime to nickel sized hail								
Jefferson County									
Fairfield	**08**	**1926CST** **1928CST**			**0**	**0**			**Hail(0.88)**
	Penny to nickel sized hail								
Jefferson County									
Libertyville	**08**	**1927CST**			**0**	**0**	**5K**		**Hail(1.00)**
	Hail estimated at 1 inch								
Van Buren County									
3 WNW Birmingham	**08**	**1930CST**			**0**	**0**			**Hail(0.88)**
	Dime to nickel sized hail for 5 minutes.								
Henry County									
Mt Pleasant	**08**	**1959CST** **2000CST**			**0**	**0**			**Hail(0.88)**
	Nickel hail from unknown source								

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

IOWA, East Central and Southeast

Henry County

Mt Union **08** **2005CST** **0** **0** **Hail(0.88)**
2010CST

Hail for a 10 minute duration. Best estimates indicate that severe hail of penny to nickel size fell for close to 5 minutes in the 2005-2010 CST time period.

Henry County

Mt Union **08** **2011CST** **0** **0** **0.20K** **Thunderstorm Wind (MG54)**

Public report of measured 54 knot (62 mph) wind gust that downed some branches in the town of Mt. Union. Radar data suggests a downburst occurred in the forward flank downdraft of the storm.

An early spring storm system brought the first severe storms of the season to the area. A strong low level jet pushed air over a warm front across northern Missouri causing elevated thunderstorms developed between the warm front and a convergence line that ran from northern Missouri into southeast Wisconsin. Since the storms were elevated all but one of the severe reports were hail. One downburst did occur in the town of Mt. Union, Iowa that caused tree damage.

Van Buren County

5.1 WSW Birmingham **12** **1403CST** **0** **0** **Hail(0.75)**

dime size hail; estimated 40 to 50 mph winds

Louisa County

4 SE Wapello **12** **1500CST** **0** **0** **Hail(0.75)**

Scott County

Davenport **12** **1530CST** **0** **0** **Heavy Rain**
2350CST

3.50 inches of rain in 8 hours.

Jefferson County

Packwood **12** **1636CST** **0** **0** **Funnel Cloud**
1637CST

Funnel cloud off to the south

Jones County

Anamosa **12** **1656CST** **0** **0** **10K** **Hail(0.88)**
1658CST

Wind driven hail damaged some cars

Cedar County

Lowden **12** **1714CST** **0** **0** **Hail(0.75)**

from co-op observer; dime size hail

Van Buren County

Countywide **12** **1742CST** **0** **0** **15K** **Hail(1.75)**
1755CST

Hail ranging from 1.00 inch (quarter) to 1.75 inch (golfball) fell from Keosauqua northeast to the Van Buren/Henry county line from a supercell. Trained spotters, the emergency manager, and the Keosauqua co-operative observer reported 1.00-1.75 inch hail covering the ground in Keosauqua around 1745 CST. One inch hail occurred in Utica during the 1750-1754 CST time period along with heavy rain.

Van Buren County

Keosauqua **12** **1742CST** **0** **0** **30K** **Hail(1.75)**
1746CST

Emergency manager's truck damaged. There is probable unknown damage to residences and cars in town as well.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

IOWA, East Central and Southeast

Henry County
Countywide | **12** | **1800CST**
1828CST | **0** | **0** | **20K** | | **Hail(2.00)**
The supercell from Van Buren County moved into Henry County and continued into northwest Des Moines county and then into Louisa county and produced hail ranging from .88 inch (nickel) to 2.00 inches. Hail of 1.75 to 2.00 inches fell south of Mt Pleasant with confirmed hail of at least 1.25 inches in the city of Mt Pleasant.

Henry County
1 SE Hillsboro | **12** | **1800CST** | **0** | **0** | | | **Hail(0.88)**

Van Buren County
Utica | **12** | **1800CST** | **0** | **0** | **5K** | | **Hail(1.00)**

Van Buren County
Utica | **12** | **1800CST** | **0** | **0** | | | **Heavy Rain**
3 feet of water in fields

Henry County
8 S Mt Pleasant | **12** | **1807CST** | **0** | **0** | | | **Hail(2.00)**
Tennis ball sized hail was reported to be breaking windows on cars.

Henry County
Salem | **12** | **1807CST** | **0** | **0** | | | **Hail(0.88)**

Henry County
Mt Pleasant | **12** | **1810CST**
1828CST | **0** | **0** | **100K** | | **Hail(1.25)**
Also reported by spotters. A WQAD-TV weather spotter (John and Alice Held) in Mt Pleasant took a picture of the hail with a quarter placed beside it as a size reference. Hail sizes in Mt Pleasant ranged from 0.70 inches (dime) to 1.25 inches.

Des Moines County
Countywide | **12** | **1824CST** | **0** | **0** | **10K** | | **Hail(1.00)**
The supercell from Henry County Iowa clipped the northwest corner of Des Moines county producing severe hail. The only hail report was north of Yarmouth were 1 inch hail was observed during the 1823-26 CST time period.

Des Moines County
1.5 N Yarmouth | **12** | **1824CST** | **0** | **0** | **3K** | | **Hail(1.00)**
Also heavy rain

Henry County
Mt Union | **12** | **1828CST** | **0** | **0** | **10K** | | **Hail(1.00)**
dime to quarter size hail

Louisa County
Countywide | **12** | **1833CST** | **0** | **0** | **15K** | | **Hail(1.75)**
The supercell entered Louisa county from northwest Des Moines and Henry counties producing hail up to 1.75 inches (golfball). Morning Sun saw 1.75 inch hail around 1833 CST. After passing over Morning Sun, the supercell appeared to fall apart with no additional hail reports being received.

National Weather Service
Storm Data and Unusual Weather Phenomena

March 2006

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
IOWA, East Central and Southeast									
Louisa County									
Morning Sun	**12**	**1833CST**			**0**	**0**	**30K**		**Hail(1.75)**
	At the fire station								
Henry County									
1 SE New London	**12**	**1912CST**			**0**	**0**			**Hail(0.88)**
Des Moines County									
Pleasantgrove	**12**	**1917CST**			**0**	**0**	**5K**		**Hail(1.00)**
Des Moines County									
Yarmouth	**12**	**1919CST**			**0**	**0**	**5K**		**Hail(1.00)**
Van Buren County									
Douds to Leando	**12**	**1930CST**			**0**	**0**	**6K**		**Hail(1.00)**
	hail damage to a car								
Scott County									
Davenport	**12**	**1933CST**			**0**	**0**			**Heavy Rain**
		1945CST							
	Street flooding at Bridge and East 37th								
Louisa County									
2 S Wapello	**12**	**1936CST**			**0**	**0**	**5K**		**Hail(1.00)**
Jefferson County									
3 E Fairfield	**12**	**1937CST**			**0**	**0**			**Hail(0.75)**
		1939CST							
	dime size hail								
Scott County									
Walcott	**12**	**1937CST**			**0**	**0**			**Hail(0.75)**
		1939CST							
Scott County									
Bettendorf to Davenport	**12**	**1953CST**			**0**	**0**	**400K**		**Flash Flood**
	13	**0100CST**							

Thunderstorms trained across the Quad City Metro area and produced rainfall rates exceeding 1 inch per 30 minutes. At 2000 CST an off duty NWS employee reported 2 feet of water over the roads in his neighborhood along the Bettendorf/Davenport city limits. By 2134 CST media and law enforcement were reporting water 4 inches deep was flowing into the Davenport Police Station on Harrision street. Numerous streets were closed due to high water; Harrision by the police station and River Drive in several spots. The media was reporting sinkholes developing on some streets in Davenport with some residences flooded. Although unknown at the time, the Federal Building in downtown Davenport had its basement partially flooded. Near the Oscar Mayer/Kraft plant, 2-3 feet of water was on second street while River Drive and 3rd street by the Quad City Times Newspaper had thigh deep water. The flash flooding in Davenport was exacerbated from winter debris blocking storm drains and therefore preventing or restricting the amount of water getting into storm sewers.

By 2230 CST, spotters and the media were reporting that flooding in downtown Davenport was beginning to recede. It is unknown how many buildings received water inside them but it is probably safe to say it was a few dozen. The flooding of the police station was caused by a police car blocking a storm sewer drain. A city engineer with Davenport concluded that this level of flooding was typical for a 15 to 20 year event.

KMLI ASOS reported 1.78 inches of rain for 12 March 2006 of which 1.66 inches fell during the 1800-2400 CST time period. At the same time, the KDVN ASOS reported 1.05 inches of rain for 12 March 2006. The heaviest rain occurred during the 1900-2300 CST time period in a narrow band in between the two ASOS sites. The highest know rainfall amount occurred in central Davenport where 3.50 inches of rain fell. The closeness of the heavy rainband to the KDVN 88D resulted in a severe underestimation of the rainfall. Rainfall estimates from the distant KILX and KLOT 88D sites indicate 3-4 inches of rain fell.

National Weather Service
Storm Data and Unusual Weather Phenomena

March 2006

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

IOWA, East Central and Southeast

Washington County
1.8 W Washington | **12** | **2000CST** | | | **0** | **0** | **3K** | | **Hail(1.00)**
just west of town

Muscatine County
.8 NW Muscatine | **12** | **2009CST** **2011CST** | | | **0** | **0** | | | **Hail(0.88)**
covered the ground

Scott County
Le Claire | **12** | **2010CST** | | | **0** | **0** | | | **Hail(0.88)**
dime to nickel sized hail

Washington County
Brighton | **12** | **2013CST** | | | **0** | **0** | | | **Hail(0.88)**
dime to nickel sized hail

Muscatine County
6 E Muscatine | **12** | **2015CST** | | | **0** | **0** | | | **Hail(0.88)**

Johnson County
Lone Tree | **12** | **2040CST** | | | **0** | **0** | | | **Hail(0.75)**
dime size hail & heavy rain

Johnson County
Lone Tree | **12** | **2040CST** | | | **0** | **0** | | | **Heavy Rain**
also dime sized hail

Van Buren County
2.8 N Farmington | **12** | **2044CST** **2045CST** | | | **0** | **0** | | | **Hail(0.75)**
dime size hail

Des Moines County
Pleasantgrove | **12** | **2055CST** | | | **0** | **0** | | | **Hail(0.75)**

Jackson County
Monmouth | **12** | **2055CST** | | | **0** | **0** | | | **Hail(0.75)**
dime size hail

Van Buren County
Birmingham | **12** | **2056CST** **2057CST** | | | **0** | **0** | **4K** | | **Hail(1.00)**

Jefferson County
Countywide | **12** | **2100CST** **2115CST** | | | **0** | **0** | **5K** | | **Thunderstorm Wind (EG52)**
limbs down across the southern part of the county

Jefferson County
7 SE Fairfield | **12** | **2100CST** | | | **0** | **0** | | | **Hail(0.88)**
penny to nickel sized hail

Henry County
Salem | **12** | **2105CST** | | | **0** | **0** | | | **Hail(0.75)**

Muscatine County
Muscatine | **12** | **2105CST** **2244CST** | | | **0** | **0** | **10K** | | **Heavy Rain**
Heavy rain of unknown amounts fell in just under 2 hours in Muscatine. At the intersection of Leroy Street and Bidwell Road a 10 by 12 foot section of pavement buckled and sank 3-4 inches. There was a pre-existing crack in the pavement and water running down Leroy Street ran into the crack and scoured out the sub-roadbed

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

IOWA, East Central and Southeast

Henry County
Mt Pleasant 12 2112CST 0 0 **Hail(0.88)**

Clinton County
Clinton 12 2118CST 2120CST 0 0 2K **Thunderstorm Wind (EG52)**
Sign down. Transformer struck by lightning

Henry County
Hillsboro 12 2120CST 0 0 **Hail(0.88)**

Van Buren County
Farmington 12 2125CST 0 0 **Hail(0.75)**
dime size hail

Benton County
Norway 12 2128CST 0 0 **Hail(0.75)**

Louisa County
Wapello 12 2128CST 2153CST 0 0 **Heavy Rain**
moderate street flooding

Lee County
.7 ENE Viele 12 2130CST 2133CST 0 0 5K **Thunderstorm Wind (EG52)**
An empty semi traveling south on U.S. 61 was hit by a wind gust just after going over a railroad overpass. The gust blew the semi into the ditch and turned it on its side.

Lee County
Ft Madison 12 2146CST 0 0 **Hail(0.88)**

Des Moines County
Middletown 12 2149CST 0 0 **Hail(0.88)**
Also heavy rain

Des Moines County
Middletown 12 2149CST 0 0 **Thunderstorm Wind (EG52)**
estimated 60 mph gust

Des Moines County
Burlington 12 2150CST 2154CST 0 0 20K **Hail(1.75)**
Nickel to golfball sized hail; also reported by NWS personnel

Des Moines County
Burlington 12 2150CST 0 0 **Thunderstorm Wind (EG52)**

Des Moines County
Burlington Arpt 12 2150CST 0 0 10K **Hail(1.75)**
NWS electronic technicians reported damage to KBRL ASOS during a scheduled maintenance in April. There was possibly some damage done to buildings and planes at the airport. Time estimated based on radar, observations, and other reports.

Des Moines County
2 E Mediapolis 12 2150CST 2151CST 0 0 **Hail(0.88)**
just east of the city; also estimated 50 mph winds

Des Moines County
Burlington 12 2203CST 0 0 **Heavy Rain**
minor street flooding on Madison Ave.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

IOWA, East Central and Southeast

Buchanan County

Fairbank **13** **0121CST** **0** **0** **5K** **Hail(1.00)**

nickel to quarter sized hail; hail 1 inch deep on ground

A strong spring storm system moved from the central Plains into the Great Lakes region from 12 March to 13 March 2006. An initial low level jet of 30-40 knots increased to 40-50 knots after sunset on 12 March which increased the available moisture for thunderstorms and heavy rain development.

A series of upper level disturbances developed waves of thunderstorms during the afternoon and overnight hours along and north of the warm front. Low freezing and wet bulb zero levels north of the warm front resulted in the storms being prolific hail producers. Outflow boundaries left over from the initial thunderstorm waves combined with the northward moving warm front provided the focus for locally heavy rainfall that lead to flash flooding in the Quad Cities metropolitan area.

IAZ076>078-087>089-098>099 **Keokuk - Washington - Louisa - Jefferson - Henry - Des Moines - Van Buren - Lee**

21 **0200CST** **0** **0** **16K** **Winter Weather**
1130CST

Also from Co-op observers

An early Spring winter storm moved from the central Plains into the Ohio Valley from 20 March to 21 March 2006. An initially dry atmosphere precluded precipitation from reaching the ground but once saturation had occurred, snow broke out over southeast Iowa, west central Illinois, and far northeast Missouri in a 3-5 hour time period. Most of the snow had fallen by sunrise on 21 March. Snowfall amounts were generally 2-4 inches from Interstate 80 down to U.S. 34 with 4-6 inches from U.S. 34 on south. Mesoscale forcing during the morning of 21 March allowed for a band of 4-6 inch snowfall to occur along a line from Oskaloosa, Iowa to Galva, Illinois.

MISSOURI, Northeast

MOZ009>010 **Scotland - Clark**

01 **0000CST** **0** **0** **Drought**
31 **2359CST**

The drought that began back in July 2005 and re-emerged in February 2006 continued through March 2006 but shrunk considerably in size and scope by the start of April 2006. This shrinkage was due to a persistent wet pattern that had set up during March 2006 and continued into April 2006. Since the growing season had yet to begin, the drought was essentially hydrologic in nature. A report of the hydrologic conditions is supplied by the service hydrologist.

River Conditions

Monthly stream flows for March averaged near normal (25th to 75th percentile) to below normal (10th to 24th percentile). All basins averaged below normal except for the lower Cedar-Iowa River basins and the entire Rock River basin, which averaged near normal.

Stream flows began the month with most locations reporting stream flows that were below normal (10th to 24th percentile) or much below normal (less than 10th percentile). A few locations reported near normal (25th to 75th percentile) conditions and one location reported a record low flow for the day. Stream flows gradually decreased until moderate rainfall fell on the 5th. On the 6th, stream flows began increasing in response to this rainfall. Stream flows then remained nearly steady or increased slightly through the 13th when most locations reported near normal conditions. Some locations reported below normal (10th to 24th percentile) flows while other locations reported above normal (76th to 90th percentile) flows.

Stream flows then gradually decreased into the late parts of the month but then rose on the last day of the month. On the 30th most locations reported below normal conditions while some locations reported near or much below normal flows. Moderate rainfall on the 30th resulted in flow increases on the 31st. On that day, half of the locations reported below or much below normal flows and

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

MISSOURI, Northeast

half of the locations reported near or above below normal flows.

Source: U.S. Geological Survey, WaterWatch Web site (http://water.usgs.gov/waterwatch/.

Drought

According to the U.S. Drought Monitor maps, minimal changes in the drought situation occurred during the month. Severe drought conditions (D2) continued to cover much of the HSA with moderate drought conditions (D1) across northwestern portions of the HSA.

Scotland County									
Memphis	**12**	**1620CST**			**0**	**0**			**Hail(0.75)**
mainly pea size hail with some dime stones									
Clark County									
Revere	**12**	**1820CST** **1824CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG52)**
Branches a couple of inches in diameter down									
Scotland County									
1 E Kilwinning	**12**	**2045CST** **2047CST**			**0**	**0**	**3K**		**Hail(1.00)**
covered the ground									
Scotland County									
2.1 NW Brock	**12**	**2053CST** **2056CST**			**0**	**0**	**40K**		**Thunderstorm Wind (EG57)**
NWS survey noted two mobile homes flipped and destroyed at a nudist colony									
Scotland County									
4.3 NW Brock	**12**	**2053CST** **2056CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG52)**
NWS survey noted tree damage									
Scotland County									
4 N Memphis	**12**	**2100CST**			**0**	**0**	**6K**		**Hail(1.75)**
Clark County									
4.5 WNW Anson	**12**	**2121CST**			**0**	**0**			**Hail(0.75)**
dime size hail									

A strong spring storm system moved from the central Plains into the Great Lakes region from 12 March to 13 March 2006. An initial low level jet of 30-40 knots increased to 40-50 knots after sunset on 12 March which increased the available moisture for thunderstorms and heavy rain development.

A series of upper level disturbances developed waves of thunderstorms during the afternoon and overnight hours along and north of the warm front. Low freezing and wet bulb zero levels north of the warm front resulted in the storms being prolific hail producers. Outflow boundaries left over from the initial thunderstorm waves combined with the northward moving warm front provided the focus for locally heavy rainfall that lead to flash flooding in the Quad Cities metropolitan area.

Scotland County									
1.9 SW Arbela to 1.9 SE Granger	**12**	**2102CST** **2108CST**	**5.5**	**8**	**0**	**0**	**5K**		**Tornado (F0)**
Rated high F0									

Tornado touched down southwest of Arbela and damaged the roof of a farm house. Parallelling just to the south of U.S. 136, the tornado moved east 5.5 miles causing sporatic tree damage before entering Clark County 1.9 miles southeast of Granger or 3.2 miles west of Luray.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

MISSOURI, Northeast

Clark County

3.2 W Luray to 2.7 W Luray | **12** | **2108CST 2109CST** | **0.5** | **8** | **0** | **0** | **0.50K** | | **Tornado (F0)**

Rated high F0

Tornado entered Clark County 3.2 miles west of Luray (or 1.9 miles southeast of Granger) from Scotland county just south of U.S. 136. After entering Clark County, the tornado traveled 0.5 miles paralleling U.S. 136 causing sporatic tree damage before dissipating.

MOZ009>010 | **Scotland - Clark**

21 | **0100CST 0800CST** | **0** | **0** | **4K** | | **Winter Weather**

Also from Co-op observers.

An early Spring winter storm moved from the central Plains into the Ohio Valley from 20 March to 21 March 2006. An initially dry atmosphere precluded precipitation from reaching the ground but once saturation had occurred, snow broke out over southeast Iowa, west central Illinois, and far northeast Missouri in a 3-5 hour time period. Most of the snow had fallen by sunrise on 21 March. Snowfall amounts were generally 2-4 inches from Interstate 80 down to U.S. 34 with 4-6 inches from U.S. 34 on south. Mesoscale forcing during the morning of 21 March allowed for a band of 4-6 inch snowfall to occur along a line from Oskaloosa, Iowa to Galva, Illinois.

Scotland County

Memphis | **30** | **2108CST 2115CST** | **0** | **0** | **10K** | | **Thunderstorm Wind (EG57)**

Several homes with siding partially removed. An older gas station had its roof partially removed.

A strong spring storm system produced two separate squall lines that moved through northern Missouri, southeast Iowa, and west central Illinois. The first squall line produced marginally severe winds in Hancock County south of Sutter. The second squall line produced severe winds in Scotland County at Memphis. Several reports of nonsevere thunderstorm winds of 43 to 48 knots (50 to 55 mph) were received from spotters or observed by AWOS/ASOS stations across northeast Missouri, southeast Iowa, and west central Illinois. Half inch hail was reported 2.5 miles south of Warsaw in Hancock County at 2152-2153 CST